AMENDMENTS TO THE CLAIMS

1-10. (Canceled)

11.   (Currently Amended) A method for preventing senility by constructing and applying a Noise-Vocoded Speech Sound signal comprising: produced by

dividing at least a portion of a speech signal into a prescribed frequency band signals; and

extracting envelopes of each of the prescribed frequency band signals;

subjecting each of the frequency band signals to noise degradation;, and

summing up the outputs of the frequency band signals to form the Noise-Vocoded Speech Sound signal;

outputting the Noise-Vocoded Speech Sound signal such that the Noise-Vocoded Speech Sound signal activates various brain regions other than typically activated brain regions during aural recognition.

12.   (Currently Amended) A method for preventing senility by constructing and applying a Noise-Vocoded Speech Sound signal comprising steps of: produced by

dividing at least a portion of a speech signal into a plurality of frequency band signals and

extracting each of prescribed frequency band signals from a speech signal using a plurality of first bandpass filters of a first bandpass filter section;

extracting each of envelopes of the frequency band signals using each of envelope extractors of an envelope extraction section;

subjecting the frequency band signals to noise degradation, and

applying a noise source signal to a plurality of second bandpass filters of a second bandpass filter section;

extracting noise signals corresponding to the plurality of prescribed frequency band signals;

multiplying each of outputs from the envelop extraction section and each of outputs from the second bandpass filter section in a multiplication section;

summing up the outputs from the multiplication section in an addition section to form the Noise-Vocoded Speech Sound signal; and

outputting the Noise-Vocoded Speech Sound signal such that the Noise-Vocoded Speech Sound signal activates various brain regions other than typically activated brain regions during aural recognition.

13.   (Canceled)

14.   (Currently Amended) The method for preventing senility according to claim ~~13~~12, wherein at least one of the number of the first and second bandpass filters and the ~~boundary~~ prescribed frequency of ~~frequency bands of~~ the first and second bandpass filters can be modified at least according to a language.

15.   (Currently Amended) The method for preventing senility according to claim ~~13~~12, wherein at least one of the number of the first and second bandpass filters and the ~~boundary~~ prescribed frequency of ~~frequency bands of~~ the first and second bandpass filters can be modified through automatic language recognition.

16.   (Previously presented) The method for preventing senility according to claim 11 or 12, wherein only a speech component is extracted from the speech signal, and the Noise-Vocoded Speech Sound signal is produced from the extracted speech signal.

17.   (Previously presented) The method for preventing senility according to claim 11 or 12, wherein an output signal of a microphone is the speech signal.

18.   (Previously presented) The method for preventing senility according to claim 11 or 12, wherein the Noise-Vocoded Speech Sound signal is produced from a stored speech signal.

19.   (Canceled)

20.   (Currently Amended) The method for preventing senility according to ~~claims~~claim 11~~,~~ or 12 ~~and 19,~~ further comprising:

an output step of outputting the Noise-Vocoded Speech Sound signal to a user~~;~~

~~a response input step of~~ accepting a user's response~~,~~; and

~~a correctness outputting step of~~ outputting ~~the~~ correctness of the response.

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